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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,575	11/29/2006	Heino Heckmann	2004DE106	6236
25255 7590 06/10/2010 CLARIANT CORPORATION INTELLECTUAL PROPERTY DEPARTMENT 4000 MONROE ROAD CHARLOTTE, NC 28205				
EXAMINER VAJDA, PETER L.				
ART UNIT 1795		PAPER NUMBER		
MAIL DATE 06/10/2010		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,575

Applicant(s)

HECKMANN ET AL.

Examiner

PETER L. VAJDA

Art Unit

1795

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/20/2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 05/20/2010

DETAILED ACTION

The applicant's response filed 05/20/2010 has been received and considered. The applicant has amended claims 1-9 and cancelled claim 10. After consideration of the applicant's arguments as presented in the response, the examiner has not found them to be persuasive. Therefore, all pending rejections are maintained and a complete response to the applicant's arguments is presented below in the Response to Arguments section of this action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Dietz *et al.* (US Patent 5,318,627).

Dietz teaches a pigment dispersant/pigment combination recited as a colorant by the applicant in pending claim 1 and a method of coloring a printing material such as a toner or developer (Col. 4 In. 18 – Col. 5 In. 35 and Col. 7 In. 23-43). Specifically, Dietz teaches a base pigment of formula (I) which has the exact structure as the applicant's base pigment in pending claim 1. Furthermore, Dietz teaches pairing the pigment of formula I with a pigment dispersant of formula (II), wherein formula II is represented by

Q-[Y-X]_m. In formula (II) of Dietz, Q is an m-valent radical of the base pigment of formula (I), Y is a bridge forming group defined by the same linking groups as the applicant's Y group in formula (II) of pending claim 1, and X is the radical or an aliphatic or aromatic five or six-membered heterocyclic system bound to bridging member Y via a carbon atom and is defined the same as the applicant's X in pending claim 1 (Col. 4 In. 35-68). Dietz further teaches that dioxazine compounds of the class of pigment dispersants of formula (II) that are particularly useful have the composition of formula (III), which is the same as the applicant's formula (III) recited in pending claim 4. The applicant further defines Y and X in pending claims 2 and 3 to include different linkages (in the case of Y) and different radicals (in the case of X), however, Dietz also teaches that Y and X may be selected from many, if not all, of the linkages and radicals listed in pending claims 2 and 3 (Col. 4 In. 35 – Col. 5 In. 54). Furthermore, *m* in formula (II) of Dietz is taught to be a number of from 0.1 to 4 (Col. 5 In. 27-34). Additionally, the pigment dispersant of formula (II) is taught by Dietz to be added to the pigment preparation in an amount of from 0.1 to 25% by weight of the base pigment of formula (I) (Col. 6 In. 3-13). The pigment preparation taught by Dietz is taught to be especially useful in printing inks or toners by adding the pigment preparation to high-molecular weight organic materials (i.e. binder resins of toners) (Col. 7 In. 23-43).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dietz *et al.* (US Patent 5,318,627) in view of Coffey (US PGP 2002/0119314).

The complete discussion of Dietz *et al.* above is incorporated herein. Dietz, however, does not teach that the pigment may be shaded with other pigments or dyes.

Coffey teaches colorized rubber particles that are colored by inorganic or organic pigments. As a suitable pigment, Coffey teaches the use of C.I. Pigment Violet 23 (which has the same formula as the formulas (I) of Dietz and the applicant) and teaches that pigment dispersions may be blended together to produce many different colors and shades of color (p. 3 [0024-27]).

Both Dietz and Coffey teach the use of colorants containing pigments to color high molecular weight organic materials (such as polymers, resins and rubbers). Coffey teaches that by blending multiple pigments together different shades of color can be produced. Dietz is not directed towards an invention wherein one specific color is desired, but instead teaches that pigment preparation (pigment and pigment dispersant) are especially useful in toner particles, which are available in many different shades. Therefore, it would have been obvious to any person of ordinary skill in the art at the time of the invention to have employed the well known process of blending pigments to achieve different shades taught by Coffey to the pigment preparation taught by Dietz *et al.* This would have allowed for the production of many different shades and colors of pigment and since Dietz directs the invention towards use in toner particles, one of

ordinary skill in the art would have certainly appreciated the benefit of shading the pigment preparation of Dietz *et al.* to obtain different shades of dye.

Response to Arguments

Applicant's arguments filed 05/20/2010 have been fully considered but they are not persuasive. The applicant argues that Dietz cannot anticipate a method of coloring an inkjet ink because, in an embodiment, Dietz teaches the use of a nitrocellulose varnish, which the applicant asserts is customary in offset printing inks and not inkjet inks. However, the applicant has neither provided any factual showing to support this argument nor addressed the list of other suitable high-molecular weight organic materials listed by Dietz which includes any materials other than nitrocellulose (Col. 7 ln. 23-53). The applicant also argues that the designation of Dietz that the pigment dispersions may be used in toners has nothing to do with electrophotography. The applicant then asserts that when the Dietz patent was published, the technology of electrophotography had yet to be invented. The examiner respectfully disagrees. The Dietz patent was published in 1994, however, the first patent issued for the electrophotographic process was issued in 1942 with the title of the invention being "Electrophotography" (Carlson, Patent 2,297,691). Dry toner technology also predates the Dietz patent as evidenced by the 1991 publication of Diamond's, "The Handbook of Imaging Materials" which dedicates an entire chapter to the components and properties of dry toners. Both of these publications were published before the filing date of the Dietz patent and there is no indication in the Dietz patent that the term "toner" should be

understood to refer to a "pigment blend or laked pigments." The quoted definition of the term "toner" is provided by the applicant and the applicant has not provided a citation for where this definition is obtained. To further refute the applicant's assertion that Dietz intended the term "toner" to refer to a pigment blend, Dietz specifically teaches that the pigment dispersion be used to color high-molecular weight organic materials, many of the recited examples of which are polymeric materials (Col. 7 ln. 23-53). Diamond teaches that, "Dry xerographic toners consist of a colorant in a binder resin (p. 163, Handbook of Imaging Materials)." Therefore, there seems to be no basis in Dietz for the applicant's claim that Dietz teaches only a pigment blend or laked pigments, since the composition recited by Dietz meets the conventional definition of a toner at the time of the filing of Dietz's patent application. Furthermore, the applicant has not provided any evidence to support the positions taken in the response. According to the MPEP, the arguments of counsel cannot take the place of facts and "objective evidence must be factually supported. In order to be considered, any objective evidence must be accompanied by experimental data that corroborates the objective results (MPEP 716.01(c))." For these reasons, the applicant's arguments are not found to be persuasive and this action is made final.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER L. VAJDA whose telephone number is (571)272-7150. The examiner can normally be reached on 7:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark F. Huff/
Supervisory Patent Examiner, Art Unit 1795

/Peter L Vajda/
Examiner, Art Unit 1795
6/3/2010